CLAIMS

We claim:

1. A reduced-pressure system for treating a tissue site having a linear wound, the reduced-pressure system comprising:

a dressing bolster formed from a medical bolster material, the dressing bolster for placing on a patientôs epidermis and

an over-drape for providing a fluid seal over the dressing bolster and a portion of the patientôs epidermis;

a reduced-pressure source;

a first reduced-pressure interface fluidly coupled to the dressing bolster and the reduced-pressure source, the first reduced-pressure interface for delivering reduced pressure to the dressing bolster;

a reduced-pressure delivery conduit for fluidly coupling the reduced-pressure source and the first reduced-pressure interface; and

a second reduced-pressure interface coupled to the over-drape, wherein the second reduced-pressure interface is sized and configured to receive a subcutaneous delivery conduit and to form a ~~an~~ fluid seal about the subcutaneous delivery conduit;

wherein the over-drape is disposed between the dressing bolster and the second reduced-pressure interface; and

wherein the second reduced-pressure interface is configured to reinforce the over-drape to maintain the fluid seal around the tissue site when the over-drape is breached by the subcutaneous delivery conduit.

2. The reduced-pressure system of claim 1, further comprising a pre-formed pathway for routing the subcutaneous delivery conduit through the dressing bolster and the over-drape.

3. The reduced-pressure system of claim 1 *or claim 2*, wherein the second reduced-pressure interface comprises a nipple with an aperture having an interior diameter D_1, wherein the subcutaneous delivery conduit has an external diameter D_2, and wherein $D_1 < D_2$ whereby the fluid seal about the subcutaneous delivery conduit is formed.

4. The reduced-pressure system of claim 1 *or claim 2 or claim 3*, wherein the dressing bolster has a first surface and a second, inward facing surface for deploying over the epidermis and substantially sized to overlay the linear wound; and further comprising:

an inner layer having a first surface and a second, inward-facing surface, and formed within a treatment-area aperture, and wherein the first surface of the inner layer is coupled at least in part to the second surface of the dressing bolster, wherein the inner layer is pre-cut to receive the subcutaneous delivery conduit.

5. The reduced-pressure system of claim 1 *or claim 2 or claim 4*, wherein the second reduced-pressure interface comprises a pliable over-drape and one or more o-rings.

6. The reduced-pressure system of claim 1 *or any of the preceding claims*, wherein the tissue site is a first tissue site, the reduced-pressure delivery conduit is a first reduced-pressure delivery conduit and the reduced-pressure system further comprises:

a manifold delivery tube having a passageway and a distal end, the distal end configured to be inserted into the subcutaneous delivery conduit and placed adjacent a second tissue site;

a flowable material deliverable through the manifold delivery tube to the second tissue site such that the flowable material is capable of filling a void adjacent the second tissue site to create a manifold having a plurality of flow channels in fluid communication with the second tissue site; and

a second reduced-pressure delivery conduit capable of fluid communication with the plurality of flow channels of the manifold.

7. The reduced-pressure system of claim 6, wherein the manifold delivery tube and the second reduced-pressure delivery conduit are the same tube.

8. The reduced-pressure system of claim 6, wherein the manifold is bioresorbable.

9. The reduced-pressure system of claim 1 *or any of the preceding claims*, wherein:

the subcutaneous delivery conduit comprises a first conduit segment and a second conduit segment; and

the second reduced-pressure interface comprises an adapter that is sized and configured to:

receive an end portion of the first conduit segment;

receive an end portion of the second conduit segment; and

maintain a fluid coupling between the first conduit segment and the second conduit segment.

10. The reduced-pressure system of claim 1 *or any of claims 2-8*, wherein the second reduced-pressure interface comprises a molded plastic cylindrical part having:

a first surface;

a second surface having;

an outer circumference;

an aperture formed on the molded plastic cylindrical part;

wherein:

the aperture is sized to receive a conduit and generate a radial compressive force against the outer circumference of the conduit; and

the second surface comprises an adhesive for forming a fluid seal between the second surface and an over-drape of a reduced-pressure wound dressing assembly.

11. The reduced-pressure system of claim 10, wherein the molded plastic cylindrical part is <u>of an adequate size for a user to grip the material that forms the interface and press it against the conduit</u> ~~sized to transfer a hand-generated force equal to an amount of force required to puncture the over-drape of the reduced-pressure wound dressing assembly with the conduit~~.

12. A wound dressing assembly for treating a tissue site having a linear wound, the wound dressing assembly comprising:

a dressing bolster having a first surface and a second, inward facing surface for deploying over a patientôs epidermis

an over-drape for providing a fluid seal over the dressing bolster and a portion of the patientôs epidermis;

a first reduced-pressure interface operable to receive a reduced-pressure supply conduit;

an inner layer having a first surface and a second, inward-facing surface, and formed within a treatment-area aperture, and wherein the first surface of the inner layer is coupled at least in part to the second surface of the dressing bolster; and

a second reduced-pressure interface, wherein the second-reduced-pressure interface comprises:

an interface body formed with an aperture and having a first side and a second, patient-facing side,

wherein the aperture is sized to receive a subcutaneous delivery conduit and to form a fluid seal therewith, and

wherein the second reduced-pressure interface is configured to allow the subcutaneous delivery conduit to pass from a subcutaneous tissue site to an external site through the aperture and wherein the subcutaneous delivery conduit is routed through the treatment-area aperture and the dressing bolster to the second interface;

wherein the over-drape is disposed between the dressing bolster and the second reduced-pressure interface; and

wherein the second reduced-pressure interface is configured to reinforce the over-drape to maintain the fluid seal around the tissue site when the over-drape is breached by the subcutaneous delivery conduit.

13. The wound dressing assembly of claim 12, wherein dressing bolster and inner layer are at least partially pre-cut to allow the subcutaneous delivery conduit to pass from the treatment-area aperture to the second reduced-pressure interface.

14. The wound dressing assembly of claim 12 *or claim 13*, wherein the second reduced-pressure interface comprises a pliable over-drape and one or more o-rings.

~~15. A method of treating a tissue site having a linear wound comprising:~~

~~applying a wound dressing assembly to the tissue site, wherein the wound dressing assembly comprises:~~

~~a dressing bolster formed from a medical bolster material that is the shaped for placing on a patientôs epider overlay the linear wound,~~

~~an over-drape for providing a fluid seal over the dressing bolster and a portion of the patientôs epidermi~~

~~a first reduced-pressure interface fluidly coupled to the dressing bolster for delivering reduced-pressure to the dressing bolster, and~~

~~a second reduced-pressure interface coupled to the over-drape, wherein the second reduced-pressure interface is sized and configured to receive a subcutaneous delivery conduit and to form a fluid seal between the subcutaneous delivery conduit and the wound dressing assembly;~~

~~fluidly coupling a reduced-pressure delivery conduit to a reduced-pressure source and the first reduced-pressure interface;~~

~~delivering reduced pressure to the reduced-pressure delivery conduit;~~

~~fluidly coupling a subcutaneous delivery conduit to the second interface; and~~

~~and delivering reduced pressure to the subcutaneous delivery conduit.~~

~~16. The method of treating a tissue site having a linear wound of claim 15, wherein the dressing bolster is pre-cut to receive the subcutaneous delivery conduit.~~

~~17. The method of treating a tissue site having a linear wound of claim 15 *or claim 16*, wherein the tissue site is a first tissue site and further comprising:~~

~~coupling a manifold delivery tube to the second reduced-pressure interface, the manifold delivery tube having a passageway and a distal end, the distal end configured to be inserted into the subcutaneous delivery conduit and placed adjacent a second tissue site;~~

~~delivering a flowable bioresorbable material through the manifold delivery tube to the second tissue site such that the flowable bioresorbable material is capable of filling a void adjacent the second tissue site to create a manifold having a plurality of flow channels in fluid communication with the second tissue site;~~

~~coupling a reduced-pressure delivery conduit to the second reduced-pressure interface, the reduced-pressure delivery conduit capable of fluid communication with the plurality of flow channels of the manifold; and~~

~~applying reduced pressure to the second tissue site.~~

~~18. The method of treating a tissue site having a linear wound of claim 17, wherein the manifold delivery tube and the reduced-pressure delivery conduit are the same tube.~~

~~19~~ 15. A method of manufacturing a wound dressing assembly for treating damaged subcutaneous damaged tissue, the method of manufacturing comprising the steps of:

providing a dressing bolster formed from a medical bolster material, the dressing bolster for placing on a patientôs epidermis and a linear wound;

providing an over-drape for providing a fluid seal over the dressing bolster and a portion of the patientôs epidermis;

providing a reduced-pressure source;

providing a first reduced-pressure interface for delivering reduced pressure to the dressing bolster;

providing a second reduced-pressure interface;

wherein the over-drape is disposed between the dressing bolster and the second reduced-pressure interface; and

coupling the second reduced-pressure interface to the over-drape, wherein the second reduced-pressure interface is sized and configured to reinforce the over-drape to maintain the fluid seal around the tissue site when the over-drape is breached by ~~receive~~ a subcutaneous delivery conduit ~~and to form a fluid seal therebetween~~.

~~20~~ 16. The method of manufacturing a wound dressing assembly of claim 19, wherein the second reduced-pressure interface comprises a preformed pathway for routing the subcutaneous delivery conduit through the dressing bolster.

~~21~~ 17. The method of manufacturing a wound dressing assembly of claim 19, wherein the dressing bolster has a first surface and a second, inward facing surface for deploying over the patientôs epidermis and substantially comprising:

providing an inner layer having a first surface and a second, inward-facing surface, and formed within a treatment-area aperture,

wherein the first surface of the inner layer is coupled at least in part to the second surface of the dressing bolster, and

wherein the inner layer is pre-cut to receive the subcutaneous delivery conduit.

~~22. The dressings, systems, and reduced-pressure interfaces shown and described herein.~~